



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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October 2, 1991

Mr. William Petty
130 South 300 East
Moab, Utah 84532

Dear Mr. Petty:

Re: Seeding Happy Jack Site, M/037/024, San Juan County, Utah

Pursuant to your request for a seed mix recommendation and a description of reclamation methodology, I have put together the following. You will need to purchase the seed based on the following recommended rates and species type.

Seed Mix Recommendation

Common Name (Species)

Rate lbs/ac

Grasses

| | |
|--|---|
| Indian ricegrass (<i>Oryzopsis hymenoides</i>) | 3 |
| Crested wheatgrass (<i>Agropyron desertorum</i>) | 2 |
| Bluebunch wheatgrass (<i>Agropyron spicatum</i>) | 2 |
| Sand dropseed (<i>Sporobolus cryptandrus</i>) | 1 |

Forbs

| | |
|---|---|
| Filaree (<i>Erodium cicutarium</i>) | 2 |
| Yellow sweetclover (<i>Melilotus officinalis</i>) | 2 |

Shrubs

| | |
|--|---|
| Four-wing saltbush (<i>Atriplex canescens</i>) | 3 |
| Shadescale (<i>Atriplex confertifolia</i>) | 3 |
| Rabbitbrush (<i>Chrysothamnus nauseosus</i>) | 2 |
| Wright buckwheat (<i>Eriogonum wrightii</i>) | 2 |

Total

22 lbs/ac

Page 2
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The Division will not require that you use all of these species, though the mix is highly recommended. If you have trouble obtaining some of these species, use a more condensed mix.

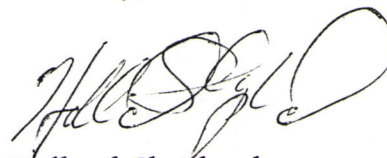
Seed Application

You will need to ensure that the soil has been loosened sufficiently before seeding by discing or harrowing (at least the first 6 inches of soil). The seed should then be evenly broadcast over the entire area. After seeding, the soil surface should be scarified to a depth of 1/4 inch to 1 inch. This will incorporate the seed at a sufficient depth such that spring germination will be enhanced. Scarification is generally done by dragging a log, chainlink fence, bedsprings or whatever is available, behind a truck or tractor.

To enhance germination, you might want to incorporate a straw or hay mulch into the soil at the discing stage. Also, fertilizer should be included in your application, especially if you use a mulch. The general rule of thumb is 2,000 lb/ac mulch and 100 lbs/ac of diammonium phosphate 18-46-0.

Please call me if you have further questions.

Sincerely,

A handwritten signature in dark ink, appearing to read 'H. Shepherd', written in a cursive style.

Holland Shepherd
Senior Reclamation Specialist

jb
M037024.1